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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/652,735 | 08/31/2000 | Leif Einar Aune | 28170-00022 | 3631 |

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EXAMINER

LEE, PHILIP C

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2154

DATE MAILED: 10/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/652,735

Applicant(s)

AUNE, LEIF EINAR

Examiner

Philip C Lee

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2. 6) ☐ Other:

DETAILED ACTION

1. Claims 1-10 are presented for examination.
2. It is noted that although the present application does contain line numbers in the specification and claims, the line numbers in the claims do not correspond to the preferred format. The preferred format is to number each line of every claim, with each claim beginning with line 1. For ease of reference by both the Examiner and Applicant all future correspondence should include the recommended line numbering.
3. The specification is objected to because of the following informalities and grammar errors, page 2 (line 15), "utilisation". Appropriate correction is required.

Claim Rejections – 35 USC 112

4. Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
 - a. The following terms lack proper antecedent basis:
 - i. the global pool – claim 1.

- b. Claim language in the following claims is not clearly understood:
 - i. As per claim 1, line 1, it is not clearly understood what “GPRS” stands for [i.e. please expand the abbreviation]; Line 3, it is uncertain if the “available addresses” refer to the “IP-addresses” in claim 1, line 1; Lines 4-5, it is unclear “which” processor are adapted to supply an address from the global pool to a user upon request [i.e. the global processor or the application processor?].
 - ii. As per claims 3 and 6, line 2, it is unclear “which” said processor is adapted to release a group of addresses [i.e. the global processor or the application processor?]; Lines 4-5, it is uncertain if “ an application processor” refers to the application processor in claim 1 [i.e. if they are the same then a “said” or “the” must be used.].
 - iii. As per claim 9, line 3 it is not clearly understood what “RAM” stands for [i.e. please expand the abbreviation].
 - iv. As per claim 10, lines 4-6, it is uncertain “which” processors are adapted to supply a resource from the global pool to a user upon request [i.e. the global processor or the application processors?].

Claim Rejections – 35 USC 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schutte et al, U.S. Patent 6,178,455 (hereinafter Schutte).

7. As per claim 1, Schutte taught the invention substantially as claim for distributing IP-addresses in a GPRS network (col. 22, lines 25-27), which network comprises a global processor holding a pool of available addresses, and a number of external networks comprising application processors, which processors are adapted to supply an address from the global pool to a user upon request (Abstract; col. 3, lines 66-col. 4, lines 7), each application processor is arranged to hold an internal pool of IP-addresses (col. 11; lines 50-53), the application processor is adapted to request IP-addresses from the global processor (abstract; col. 16, lines 39-48), whereupon the global processor is adapted to respond by transferring a group comprising a number of IP-addresses to the requesting application processor (abstract; 122, figure 1; col. 11, lines 61-64; col. 16, 39-48).

8. Schutte did not teach the application processor to request IP-addresses when the internal pool is empty or nearly empty. However, Schutte taught that application processor requests IP-addresses from the global processor when it is activated (col. 16, lines 39-45). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Schutte to change the events that trigger the application processor to request IP-

addresses because requesting IP-addresses when internal pool is empty or nearly empty will increase the efficiency by avoiding the delay in distributing IP-addresses of Schutte's method.

9. As per claim 2, Schutte taught the invention substantially as claimed in claim 1 above. Schutte further taught the groups of IP-addresses in said internal pool has a predefined static size (col. 16, lines 51-53; col. 22, lines 64-col. 23, lines 3).

10. As per claim 8, Schutte taught the invention substantially as claimed in claim 1 above. Schutte further taught the global processor is arranged to release addresses that not has been used in a preceding interval of time (col. 17, lines 49-64).

11. As per claim 10, Schutte taught the invention substantially as claim for distributing resources in a network, which network comprises a global processor holding a pool of available resources, and a number of external networks comprising application processors, which processors are adapted to supply a resource form the global pool to a user upon request (Abstract; col. 3, lines 66-col. 4, lines 7),

each application processor is arranged to hold an internal pool of resources (col. 11; lines 50-53),

the application processor is adapted to request resources from the global processor (abstract; col. 16, lines 39-48),

whereupon the global processor is adapted to respond by transferring a group comprising a number of resources to the requesting application processor (abstract; 122, figure 1; col. 11, lines 61-64; col. 16, lines 39-48).

12. Schutte did not teach the application processor to request IP-addresses when the internal pool is empty or nearly empty. However, Schutte taught that application processor requests IP-addresses from the global processor when it is activated. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Schutte to change the events that trigger the application processor to request IP-addresses because requesting IP-addresses when internal pool is empty or nearly empty will increase the efficiency by avoiding the delay in distributing IP-addresses of Schutte's method.

13. Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schutte in view of Wang et al, U.S. Patent 6,496,511 (hereinafter Wang).

14. As per claims 3-4, Schutte taught the invention substantially as claimed in claim 5 above. Schutte further taught said application processor is adapted to release a group of addresses and notify the global processor thereof (abstract; col. 19, lines 19-30; col. 27, lines 6-20).

15. Schutte did not teach a means to release, if the number of addresses in the internal pool of an application processor exceeds a predefined limit. Wang taught a means to release the IP-address by predefining a customized function (col. 20, lines 25-29; col. 6, lines 55-64).

16. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Schutte and Wang because Wang's method of customizing a function for the means of release would increase usefulness of Schutte's methods by allowing a user to predefine a customize event for triggering the release of IP-addresses.

17. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schutte in view of Dong et al, U.S. Patent 5,093,912 (hereinafter Dong).

18. As per claim 5, Schutte taught the invention substantially as claimed in claim 1 above. Schutte did not teach the size of the groups of IP-addresses in said internal pool is dynamically adjusted. Dong et al taught the size of the pool of resources could be dynamically adjusted (col. 4, lines 57-col. 5, lines 3; col. 6, lines 67-col. 7, line 3).

19. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Schutte and Dong because Dong's method of dynamically adjusting the size of the pool of resources would increase the efficiency in Schutte's invention by avoiding the limitations of stopping the main program in the processors and resetting in order to change the size of the resource pool (col. 6, lines 61-67).

20. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schutte in view of Antic et al, U.S. Patent 5,561,854 (hereinafter Antic).

21. As per claim 9, Schutte taught the invention substantially as claimed in claim 1 above in which each application processor is arranged to store said internal pool of IP-addresses in RAM (col. 9, lines 12-17).

22. Schutte did not teach making back-up copies of this pool on a persistent storage medium with regular intervals. Antic taught the method of making back-up copies of a home location register on a persistent storage medium with regular intervals (col. 3, lines 17-31).

23. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Schutte and Antic because Antic's method of making back-up copies of data would increase the reliability of Schutte's method by allowing the application process to restore the pool of IP-addresses in the event of a crash in the GPRS network (col. 1, lines 36-39).

24. Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schutte and Dong in view of Wang.

25. As per claims 6-7, Schutte and Dong taught the invention substantially as claimed in claim 5 above. Schutte further taught said application processor is adapted to release a group of addresses and notify the global processor thereof (abstract; col. 19, lines 19-30; col. 27, lines 6-20).

26. Schutte and Dong did not teach a means to release, if the number of addresses in the internal pool of an application processor exceeds a predefined limit. Wang taught a means to release the IP-address by predefining a customized function (col. 20, lines 25-29; col. 6, lines 55-64).

27. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Schutte, Dong and Wang because Wang's method of customizing a function for the means of release would increase usefulness of Schutte's and Dong's methods by allowing a user to predefine a customize event for triggering the release of IP-addresses.

CONCLUSION

28. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Peacock, U.S. Patent 6,381,650, disclosed a server program for dynamically allocated IP address.

Millet et al, U.S. Patent 6,434,627, disclosed an address translation system.

Perkins, U.S. Patent 5,159,592, disclosed a network address management comprising a global gateway and a local gateway.


Toth et al, U.S. Patent 5,708,655, disclosed a system providing a GPRS to a wireless communication station.

29. A shortened statutory period for reply to this Office action is set to expire **THREE MONTHS** from the mailing date of this action.

30. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip C Lee whose telephone number is (703)305-7721. The examiner can normally be reached on 8:AM TO 5:30 PM Monday to Thursday and every other Friday.

31. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng Ai An can be reached on (703)305-9678. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

32. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)350-6121.


ZARNI MAUNG
PRIMARY EXAMINER